<u>Amendments to the Claims</u>:

The listing of claims will replace all prior versions, and listings, of claims in the application:

<u>Listing of Claims</u>:

1.   (Canceled).

2.   (Canceled).

3.   (Canceled).

4.   (Canceled).

5.   (Canceled).

6.   (Canceled).

7.   (Canceled).

8.   (Canceled).

9.   (Canceled).

10.   (Canceled).

11.   (New)   A method for regulating an air conditioning system for a vehicle with a convertible top which is able to be opened and closed, wherein a passenger compartment of the vehicle is supplied with a controllable temperature by means of an airstream which is fed via the air conditioning system, and the air conditioning system controls the temperature of the airstream when the convertible top is closed in such a way that a deviation of an actual interior temperature of the passenger compartment determined by means of an interior temperature sensor from a predefinable setpoint interior temperature assumes a minimum value, and a state of an opened convertible top is sensed by means of a switching device included in the air conditioning system, said method comprising the steps;

sensing an open or closed state of the convertible top,

providing an air conditioning regulating process using parameters of ambient temperature, setpoint interior temperature, actual interior temperature and solar radiation when a close state of said convertible tope is sensed,

sensing a solar radiation value and comparing with a previously sensed solar radiation value or the standard solar radiation value if a solar radiation value has not been sensed, when an open state of said convertible is sensed, and

if a rise in the solar radiation value is sensed during the comparison, reducing a blowing out temperature by a first value θ_{Aq1} and keeping an air mass flow rate constant or increasing the air mass flow rate by a first value M_{q1} if the change in the blowing out temperature alone is not enough to sufficiently lower the ambient temperature, wherein the blowing out temperature and the air mass flow rate and a blowing out direction have previously been determined as a function of the predefinable setpoint interior temperature, the determined actual interior temperature, ambient temperature and solar radiation,

if a drop in the solar radiation value is sensed during the comparison,

increasing the blowing out temperature by a second value θ_{Aq2} and keeping the air mass flow rate constant, or increasing the air mass flow rate is by a second value M_{q2} if the change in the blowing out temperature alone is not enough to sufficiently increase the ambient temperature,

sensing the ambient temperature and comparing the sensed ambient temperature with a previously sensed ambient temperature or the standard ambient temperature if an ambient temperature has not been sensed,

if a rise in the ambient temperature is sensed during the temperature comparison, the blowing out temperature is reduced by a first value $\theta_{A\theta1}$ and the air mass flow rate is kept constant,

increasing the air mass flow rate by a first value $M_{\theta 1}$ if the change in the blowing out temperature alone is not enough to sufficiently reduce the ambient temperature,

if a drop in the ambient temperature is sensed during the comparison, increasing the blowing out temperature by a second value $\theta_{A\theta 1}$ and keeping the air mass flow rate constant, or increasing the air mass flow rate by a second value $M_{\theta 2}$ if the change in the blowing out temperature alone is not enough to sufficiently insure the ambient temperature,

determine whether a heating regulating process or a cooling regulating process is occurring, wherein,

in the heating regulating process, the speed of the vehicle is sensed and compared with a previously sensed speed of the vehicle or the standard speed of the vehicle if a speed of the vehicle has not yet been sensed, and if a rise in the speed of the vehicle is sensed during the comparison, at least one of the blowing out temperature is increased by a first value θ_{Av1} and the air mass flow rate is increased by a first value M_{v1}, and if a drop in the speed of the vehicle is sensed during the comparison, at least one of the blowing out temperature is reduced by a second value θ_{Av2} and the air mass flow rate is reduced by a second value M_{v2}, and wherein

in the cooling regulating process, the speed of the vehicle is sensed and compared with a previously sensed speed of the vehicle or the standard speed of the vehicle if a speed of the vehicle has not yet been sensed, and if a rise in the speed of the vehicle is sensed during the comparison, at least one of the blowing out temperature is increased by a third value θ_{Av3} and the air mass flow rate is reduced by a third value M_{v3}, and if a drop in the speed of the vehicle is sensed during the comparison, at least one of the blowing out temperature is reduced by a fourth value Δ_{Av4} and the air mass flow rate is increased by a fourth value M_{v4}.

12. (New)   The method for regulating an air conditioning system as claimed in claim 11, wherein, if an opened state of the convertible top has been sensed and at least one of a blowing out temperature and air mass flow rate has not been determined by the method, a constant predefined air mass flow rate M_N and a blowing out temperature θ_{AN} which is predetermined in accordance with a preselected setpoint temperature are used as first values for each of which a standard solar radiation value, a standard ambient temperature and a standard speed are predefined.

13. (New)   The method for regulating an air conditioning system as claimed in claim 11, wherein the step of determining whether a heating regulating process or a cooling process is occurring already takes place at the start of the method and

if it is determined that a heating regulating process is occurring, at least one of the air mass flow rate is reduced by a value $M_{q1'}$ and the blowing out temperature θ_A is kept constant by having the first value θ_{Aq1} at substantially zero, and the air mass flow rate is reduced by a value $M_{\theta1}$ and the blowing out temperature θ_A is kept constant, and

if it is determined that a cooling regulating process is occurring, at least one of the air mass flow rate is reduced by a value $M_{q2'}$ and the blowing out temperature θ_A is kept constant by having the second value θ_{Aq2} at substantially zero, and the air mass flow rate is reduced by a value $M_{\theta2}$ and the blowing out temperature θ_A is kept constant.

14. (New)   The method for regulating an air conditioning system as claimed in claim 12, wherein the step of determining whether a heating regulating process or a cooling process is occurring already takes place at the start of the sequence and

if it is determined that a heating regulating process is occurring, at least one of the air mass flow rate is reduced by a value $M_{q1'}$ and the blowing out temperature θ_A is kept constant, and the air mass flow rate is reduced by a value $M_{\theta1}$ and the blowing out temperature θ_A is kept constant, and

if it is determined that a cooling regulating process is occurring, at least one of the air mass flow rate is reduced by a value $M_{q2'}$ and the blowing out temperature θ_A is kept constant, and the air mass flow rate is reduced by a value $M_{\theta2}$ and the blowing out temperature θ_A is kept constant.

15. The method for regulating an air conditioning system as claimed in claim 11, further comprising the step of forming a change value for the blowing out temperature and a change value for the air mass flow rate from the values θ_{Aq1}, θ_{Aq2}, $\theta_{A\theta1}$, $\theta_{A\theta2}$, θ_{Av1} - θ_{Av4} and M_{q1}, M_{q2}, $M_{\theta1}$, $M_{\theta2}$, $M_{v1} - M_{v4}$, with the values for the increase being added and the values for the reduction being subtracted and the blowing out temperature and the air mass flow rate being regulated in accordance with the change value which is obtained for the blowing out temperature and the change value which is obtained for the air mass flow rate.

16. (New) The method for regulating an air conditioning system as claimed in claim 12, further comprising the step forming a change value for the blowing out temperature and a change value for the air mass flow rate from the values θ_{Aq1}, θ_{Aq2}, $\theta_{A\theta1}$, $\theta_{A\theta2}$, θ_{Av1} - θ_{Av4} and M_{q1}, M_{q2}, $M_{\theta1}$, $M_{\theta2}$, $M_{v1} - M_{v4}$, with the values for the increase being added and the values for the reduction being subtracted and the blowing out temperature and the air mass flow rate being regulated in accordance with the change value which is obtained for the blowing out temperature and the change value which is obtained for the air mass flow rate.

17.   (New)   The method for regulating an air conditioning system as claimed in claim 13, further comprising the step of forming a change value for the blowing out temperature and a change value for the air mass flow rate from the values θ_{Aq1}, θ_{Aq2}, $\theta_{A\theta1}$, $\theta_{A\theta2}$, θ_{Av1} - θ_{Av4} and M_{q1}, M_{q2}, $M_{\theta1}$, $M_{\theta2}$, M_{v1} – M_{v4}, with the values for the increase being added and the values for the reduction being subtracted and the blowing out temperature and the air mass flow rate being regulated in accordance with the change value which is obtained for the blowing out temperature and the change value which is obtained for the air mass flow rate.

18.   (New)   The method for regulating an air conditioning system as claimed in claim 14, further comprising the steps of forming a change value for the blowing out temperature and a change value for the air mass flow rate from the values θ_{Aq1}, θ_{Aq2}, $\theta_{A\theta1}$, $\theta_{A\theta2}$, θ_{Av1} - θ_{Av4} and M_{q1}, M_{q2}, $M_{\theta1}$, $M_{\theta2}$, M_{v1} – M_{v4}, with the values for the increase being added and the values for the reduction being subtracted and the blowing out temperature and the air mass flow rate being regulated in accordance with the change value which is obtained for the blowing out temperature and the change value which is obtained for the air mass flow rate.

19.   (New)   The method for regulating an air conditioning system as claimed in claim 15, wherein in the forming step a vehicle-occupant-dependent, adjustable correction value is also taken into account in the formation of the change value for the blowing out temperature and the change value for the air mass flow rate, which correction value can contribute to the change values in an additive or subtractive fashion.

20.   (New)   The method for regulating an air conditioning system as claimed in claim 16, wherein in the forming step a vehicle-occupant-dependent, adjustable correction value is also taken into account in the

formation of the change value for the blowing out temperature and the change value for the air mass flow rate, which correction value can contribute to the change values in an additive or subtractive fashion.

21. (New) The method for regulating an air conditioning system as claimed in claim 17, wherein in the forming step a vehicle-occupant-dependent, adjustable correction value is also taken into account in the formation of the change value for the blowing out temperature and the change value for the air mass flow rate, which correction value can contribute to the change values in an additive or subtractive fashion.

22. (New) The method for regulating an air conditioning system as claimed in claim 18, wherein in the forming step a vehicle-occupant-dependent, adjustable correction value is also taken into account in the formation of the change value for the blowing out temperature and the change value for the air mass flow rate, which correction value can contribute to the change values in an additive or subtractive fashion.

23. (New) The method for regulating an air conditioning system as claimed in claim 19, wherein the correction value is one of adjusted manually and defined by adaptive operator control in response to subsequent adjustment by the user.

24. (New) The method for regulating an air conditioning system as claimed in claim 20, wherein the correction value is one of adjusted manually and defined by adaptive operator control in response to subsequent adjustment by the user.

25. (New)   The method for regulating an air conditioning system as claimed in claim 21, wherein the correction value is one of adjusted manually and defined by adaptive operator control in response to subsequent adjustment by the user.

26. (New)   The method for regulating an air conditioning system as claimed in claim 22, wherein the correction value is one of adjusted manually and defined by adaptive operator control in response to subsequent adjustment by the user.

27. (New)   The method for regulating an air conditioning system as claimed in claim 11, wherein the values θ_{Aq1}, θ_{Aq2}, $\theta_{A\theta1}$, $\theta_{A\theta2}$, θ_{Av1} - θ_{Av4} and M_{q1}, M_{q2}, $M_{\theta1}$, $M_{\theta2}$, M_{v1} - M_{v4} are vehicle-dependent and are obtained from profile curves determined by measurements on the vehicle.

28. (New)   The method for regulating an air conditioning system as claimed in claim 27, wherein the profile curves are used only between predefined lower and upper threshold values for the solar radiation, ambient temperature and the speed of the vehicle, and for values below the lower threshold value the change value which is assigned to the lower threshold value is always used, and for values above the upper threshold value the change value which is assigned to the upper threshold value is always used.

29. (New)   The method for regulating an air conditioning system as claimed in claim 28, wherein 200 W and 1 000 W are used as threshold values for the solar radiation, 5°C and 30°C are used as threshold values for the ambient temperature, and 20 km/h and 80 km/h are used as threshold values for the speed of the vehicle.

30.   (New)   The method for regulating an air conditioning system as claimed in claim 11, wherein the steps of sensing a solar radiation value, reducing a blowing out temperature, and increasing the air mass flow rate are carried out either in chronological succession or simultaneously, wherein the steps of sensing the solar radiation value, increasing the blowing out temperature by second value and increasing the air mass flow rate are carried out either in chronological succession or simultaneously or the steps of sensing the ambient temperature, reducing the blowing out temperature and increasing the air mass flow rate are carried out either in chronological succession or simultaneously and wherein the steps of sensing the ambient temperature, increasing the blowing out temperature and increasing the air mass flow rate by second value are either carried out in chronological succession or simultaneously and wherein the steps of sensing the speed of the vehicle, increasing the blowing out temperature or the air mass flow rate are carried out either in chronological succession or simultaneously and wherein the steps of sensing the speed of the vehicle and either reducing the blowing out temperature or reducing the air flow mass are carried out either in chronological succession or simultaneously and wherein the steps of reducing the blowing out temperature or increasing the air flow mass are carried either in chronological succession or simultaneously.